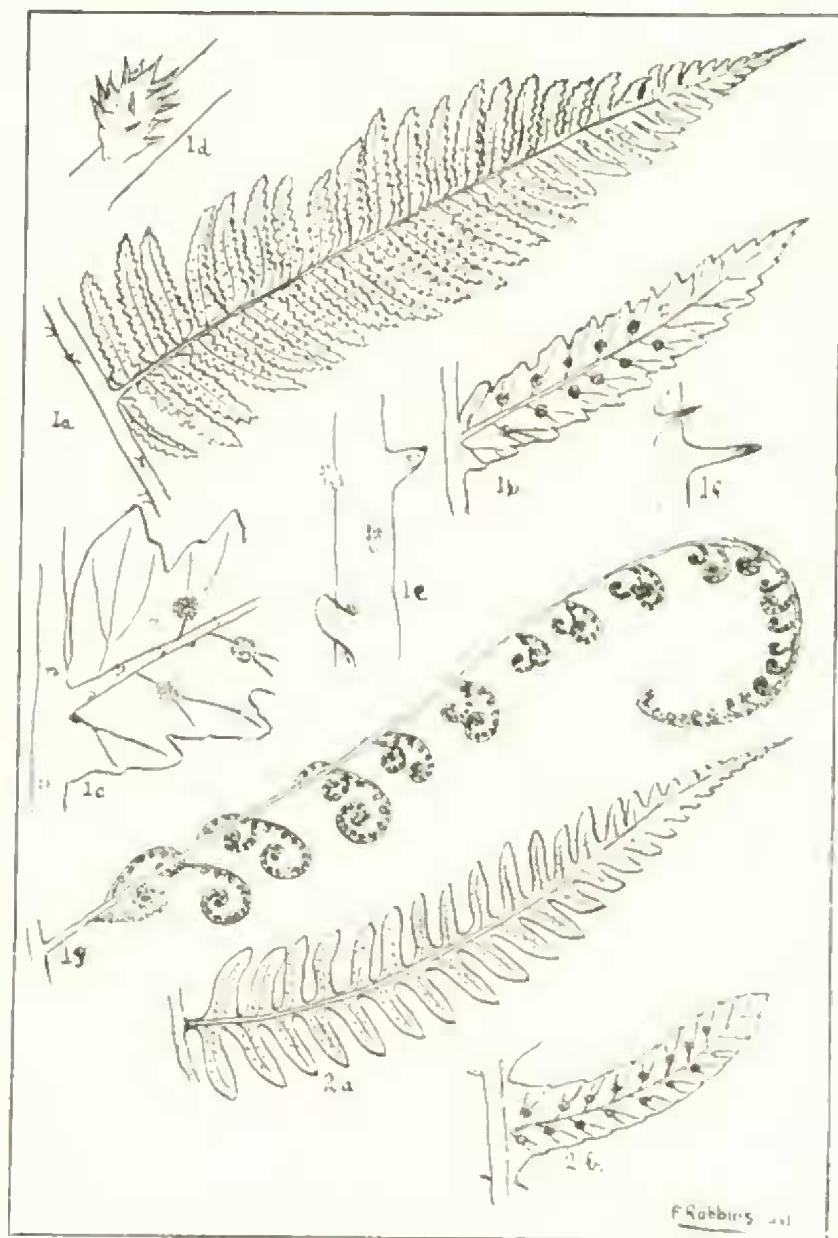


## Plate VII



*Alsophila Leichhardtiana*, a Tree-Fern new for Victoria

## A TREE-FERN NEW FOR VICTORIA

By FRANK ROBBINS, B.Sc.

On the eastern side of Mt. Drummer, eastern Gippsland, there is an extensive rain-forest jungle, which I attempted to explore in March, 1937. I was not successful in penetrating far into it, but among the 104 or more ferns and flowering plants noted, there were several interesting finds: *Alsophila Leichhardtiana* F.v.M. (Prickly or Hard-stemmed Tree-Fern); *Cyathea medullaris* (Black Tree-Fern), very rare in the State, and not recorded for eastern Victoria; and *Plantago debilis* R.Br., new record for Victoria; I had previously seen this near Orbost.

My attention was first drawn by the black slender stems with the drooping black, dead fronds near the top. The sori in the cup-like indusium at once pointed to *Cyathea*. There were only a few specimens, but a little farther down the gully, another tree-fern became quite common. Its extremely prickly nature and absence of indusium pointed to an *Alsophila*, new for Victoria, which later it was proved to be (by Government Botanist).

*Alsophila Leichhardtiana* has been recorded as common in coastal scrubs of Queensland, Maroochie (common), and in New South Wales from Port Jackson, Blue Mountains, New England, Clarence River, Hastings River, McLeay River, Tweed River, Illawarra, etc. This fern is 10 feet to 15 feet in height, with a very thin trunk, and resembles *Cyathea medullaris*, except for absence of its black appearance and drooping dead fronds. The extremely prickly bases of the fronds, particularly in the smaller specimens, make its identity unmistakable. *Alsophila australis*, our common Rough Tree-Fern, also has this characteristic, but only to the extent of roughness.

The fronds of *Leichhardtiana* are bipinnate, but the edges of the leaflet are definitely serrate, whereas in *A. australis* the leaflets are almost entire. The veining is similar for both species as also is the position of the sori on the nerves. There is a tendency to 3-forked nerves in some of my specimens. Another feature is the dark mealy surface of the underside of the ribs of the fronds, due to dark brown prickly scales (stellate hairs?). The points of these scales are of deep brown-red colour. The "prickles" grow mostly on the underside of the midribs and toward the base of the main rib are up to 5 mm. long, sharp, rigid and somewhat resembling those on a raspberry. Another conspicuous feature is the greyish appearance at the top of the trunk, which is due to the presence of numerous long greyish linear scales or hairs. The appearance of a young frond unrolled to full extent is also very striking, reminding one of a host of millipedes coiled up.

The Prickly Tree-Fern and *Cyathea medullaris* are both difficult to remove and grow in a fernery. One hopes that no fern enthusiasts will raid this rare little clump, where one is within hearing of the horns of motor-cars on the beautiful winding road just above.

#### References

- BAILEY: *Litho. Ferns Old.*, 38.  
F.v.M.: *Fragm.*, v. 53-117.  
BENTHAM: *Flora Aust.*, vii, 711.

#### Key to Drawings

- 1 (a)—*Alsophila Leichhardtiana* F.v.M. Secondary pinna ( $\times 1$ ).
- 1 (b)—Leaflet ( $\times 4$ ) showing sori and nerves.
- 1 (c)—Same ( $\times 10$ ) showing nerves, sori, and prickly scales.
- 1 (d)—Prickly scales.
- 1 (e)—Prickly protuberances on primary pinna.
- 1 (f)—Prickly protuberances on base of petiole (main rib).
- 1 (g)—Primary pinna of young frond (about 3-4 ft.) ( $\times \frac{1}{3}$ ).
- 2 (a)—*Alsophila australis*. Secondary pinna.
- 2 (b)—*Alsophila australis*. Leaflet.

### *DROSERA PLANCHONII* Hk.f., "CLIMBING SUNDEW"

In various works on the Victorian Sundews, the "Climbing Sundew" is named *Drosera Mensiesii* R.Br., and *D. Planchonii* Hk.f. and *D. Mensiesii* R.Br., var. *albiflora* Benth., are given as synonyms. During the course of some revision work on the Australian Sundews we discovered that *D. Planchonii* Hk.f. and *D. Mensiesii* R.Br. are distinct species, and find that *D. Mensiesii* is native to Western Australia, while *D. Planchonii* is indigenous to South Australia, Victoria, Tasmania and New South Wales. We have not examined any Queensland specimens.

The following key should help in the determination of the two species:

#### *Drosera Mensiesii* R.Br.

Flowers five or more in the terminal inflorescence, petals purple. Style segments numerous, entire and free almost to the base. Sepals narrowed at the base, narrow obovate and incised and fringed with long glandular hairs at the apex. The back clothed with appressed silky hairs. W.A.

#### *Drosera Planchonii* Hk.f., "Climbing Sundew"

Inflorescence few-flowered in a simple or very rarely once-forked loose raceme. Petals white, often pinkish. Styles divided into very numerous dichotomous branches arising from five free basal branches. Sepals obovate ovate, with the back slightly hairy, but the margins of the apex with long fringed hairs.

It should be observed that *D. Mensiesii* R.Br. will be deleted from the Victorian Flora and *D. Planchonii* Hk.f. added. The plant figured in Professor A. J. Ewart's *Flora of Victoria* is *D. Planchonii* Hk.f., not *D. Mensiesii* R.Br.

AUDAS, ST. JOHN AND MORRIS.